



Mr. Donald E Duthaler, JR, P.E.
Baker Capital
Director of Property Management
One West Red Oak Lane
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Don,

Listed below is the data input into the New York State Department of Environmental Conservation's "DAR-1" (Air Guide-1) version 3.6 DOS based software program for calculating ambient air quality impact screening analysis from a single or multiple sources. Found below some of the input data are the sources from which that data was obtained.

Location Code – 552200 – Westchester County – Cortlandt (Town) SWIS Codes NYSGIS Clearinghouse

http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_1/related/spcodes/swis.htm

Facility Code – (enter to assign previous code) assume facility code is "Blank"

Facility Name – Baker Property

Facility Address – 510 Furnace Dock Rd. Cortlandt Manor, NY

Facility Town – Cortlandt Manor

Standard Industrial Code - 3471 Electroplating, Plating, Polishing, Anodizing, and Coloring

http://www.osha.gov/pls/imis/sic_manual.display?id=737&tab=description

Enter Emission Point Number – Enter "Total" to input facility emission totals or perform worst case analysis for a point source. – TOTAL

Enter Source Code Default=blank – (Blank)

UTME converted from 41-16-25.90 North 73-52-08.58 West to Zone 18 Easting – 594721 Northing – 4569776

What would you like the annual emissions in? Lb/year or tons/year – LBY

Number of pollutants – 1

CAS number – 0007901-6

Sample Results:

SV-11 = $1300 \mu\text{g}/\text{m}^3 = (1.3\text{mg}/\text{m}^3)(24.45) / 131.39 \text{ g}/\text{mol}^{-1}$ (molar mass) = 0.242 ppm

SV-12 = $65,000 \mu\text{g}/\text{m}^3 = (65\text{mg}/\text{m}^3)(24.45) / 131.39 \text{ g}/\text{mol}^{-1}$ (molar mass) = 12.095 ppm

Assume discharge rate from 1 fan is 10.3 CFM = 17.5 CM/hr

Discharge mass based on worst case analytical = $(65\text{mg}/\text{m}^3)(17.5\text{CM}/\text{hr}) = 1,137.5 \text{ mg}/\text{hr}$

Emissions = $1 \text{ mg} = 2.2056 \times 10^{-6} \text{ lbs} = 1,137.5\text{mg}/\text{hr} = 0.0025 \text{ lb per hour}/21.9 \text{ lb}/\text{yr}/0.011 \text{ tons}/\text{yr}$

Height Above Structure = 4ft

Stack Height = 4 ft

Inside diameter = 3"

Exit temperature = 68 deg F

Exit Velocity = 7.9 ft/sec

Exit flow rate = 23.27 ACFM

Assumed Stack to Property Line = 50 ft

Approx building width = 75 ft

Approx building length 210 ft

Assumed direction of building 360°

USE annual guideline concentration of 0.08 ppb or 0.00008 ppm or $[(8\text{e}-5)(131.39\text{g}/\text{mol}^{-1})]/24.45 = 0.0004299 \text{ mg}/\text{m}^3 = 0.4299 \mu\text{g}/\text{m}^3$

<http://www.dec.ny.gov/chemical/23799.html>

Please feel free to contact me with any questions.

Thank you,

Joseph Sabanos
Aztech Technologies, Inc.